



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/669,822	09/24/2003	Jerry G. Aguren	200308699-1	5688	
22879	7590 04/07/2006		EXAM	INER	
HEWLETT PACKARD COMPANY			NGUYEN, MERILYN P		
P O BOX 272400, 3404 E. HARMONY ROAD			ART UNIT	PAPER NUMBER	
	INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			2163	
	,		DATE MAILED: 04/07/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summan	10/669,822	AGUREN, JERRY G.				
Office Action Summary	Examiner	Art Unit				
	Merilyn P. Nguyen	2163				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
*	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-25</u> is/are pending in the application.						
<i>,</i>	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-25</u> is/are rejected.						
7) Claim(s) is/are objected to.						
<u> </u>						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>24 September 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	have been received					
	——————————————————————————————————————					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Motice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Notice of Dransperson's Patent Drawing Review (P10-946) 3) Notice of Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>09/24/2003</u> . 6) Other: <u>Detailed Action</u> .						

Application/Control Number: 10/669,822 Page 2

Art Unit: 2163

DETAILED ACTION

1. Claims 1-25 are pending in this office action.

Acknowledges

2. Receipt is acknowledged of the following items:

Information Disclosure Statement (IDS) filed on September 24, 2003 and made of record. The references cited on the PTOL 1449 form have been considered.

Abstract

3. The abstract of the disclosure is objected to because it is written as a single sentence. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a **single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Application/Control Number: 10/669,822 Page 3

Art Unit: 2163

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites the term "autonomous" which is not described in the specification in search a way that the Examiner can rely on for relevant prior art. The specification keep repeating the term "autonomous of a user", however, there is nowhere that describe how the system "autonomous of a user".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, this claim seems to contradict with claim 1 as to the user interact with the system while claim 1 provide the system autonomous of a user.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Application/Control Number: 10/669,822 Page 4

Art Unit: 2163

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 1 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites a method for creating an electronic file, creating metadata file regarding the file, and implementing storage strategies for the file based on the metadata which only provides abstract idea. For it to be a tangible result, it must be more than just a thought or a computation. Instead, it must have real world value rather than being an abstract result.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mikesell (US 2004/0153479).

Regarding claim 15, Mikesell discloses a system (Fig. 1) comprising:

- a client computer (User 130, Fig. 1);
- a server coupled to the client computer (Server 120, Fig. 1);
- a first storage device coupled to the server having a storage attribute
 (smart storage unit 0, Fig. 1);

Art Unit: 2163

a second storage device coupled to the server having a storage attribute
 (smart storage unit 1, Fig. 1);

wherein the server appears to programs executing on the client computer as a network storage device operating in a user namespace and in a user file structure (See paragraph [0076]); and

wherein the server stores the file on at least one of the first and second storage devices in a global namespace, the selection of the storage location made by the server based on the attributes of the storage devices and storage preferences for the file (See paragraph [0076]).

Regarding claim 16, Mikesell discloses wherein the server further comprises:

a software agent executing on the server (communication medium 140, Fig. 1);

wherein the software agent interfaces with the client computer (user 130, Fig. 1) and simulates the network storage device (distributed file system 110) operating in the user namespace; and

wherein the software agent decides on which of the first and second storage devices to store the file based on the attributes of the storage devices and the storage preference for the file (See paragraph [0076]).

Regarding claim 17, Mikesell discloses wherein the server further comprises:

a software service executing on the server (switch 125, Fig. 1); and

wherein the software service stores the file on one of the first and second storage devices
based on instructions from the software agent (See Fig. 15 and paragraph [0068]).

Art Unit: 2163

Regarding claim 18, Mikesell discloses:

a first software service associated with the first storage device, the first software service executing on the server;

a second software service associated with the second storage device, the second software service executing on the server; and wherein the software agent directs at least one of the first and second

software service is associated. Please see Fig. 1, Switch 125 and paragraph [0068]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

software services to store the file on the storage device to which the

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 8-14 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US 5,983,239),

Regarding claim 8, Cannon discloses a computing system (Fig. 1) comprising:

 a host computer adapted to execute user programs (Data processing Apparatus 108, Fig. 1);

Art Unit: 2163

- a server coupled to the host computer (Data storage subsystem 102, fig. 1);
- a plurality of storage devices coupled to the server (Storage hierarchy 114, Fig.
 1);
- wherein the host computer communicates files to the server for storage on at least one of the plurality of storage devices (See col. 6, lines 15-29 and col. 14, lines 40-49); and
- wherein a program executing on the server selects on which of the plurality of storage devices to store the files based on storage characteristic preferences supplied for each file (See col. 6, lines 29-34 and line 65 to col. 7, line 7).
 Cannon teaches store the files in the storage hierarchy and determine where files are stored in the storage hierarchy 114/400 of Fig. 4 (See col. 14, lines 40-49,
 Cannon et al.). Cannon is silent as to store the files on file-by-file basis.
 However, it's well-known in the art the files store on file-by-file basis. One having ordinary skill in the art would have recognized that files are being store by one file after another file, thus is well known.

Regarding claim 9, Cannon further discloses supplying, by at least one of the user and a system administrator, a desired access speed for the file (See col. 28, claim 9, Cannon et al.).

Regarding claim 10, Cannon discloses supplying, by at least one of the user and a system administrator, a desired reliability for the file (See col. 8, lines 45-58, col. 12, line 60 to col. 13, line 40 and col. 28, lines 7-8, Cannon et al.).

Regarding claims 11 and 22, Cannon discloses moving, by a software agent, the file to a different set of one or more storage devices based on the metadata (See col. 16, lines 38-51, Cannon et al.).

Regarding claims 12 and 23, Cannon discloses wherein the program executing on the server migrates the file based on expiration of a time period specified in the storage characteristic preferences for the file (See col. 17, line 15 to col. 18, line 20).

Regarding claims 13 and 24, Cannon discloses wherein the program executing on the server migrates the file based on obsolescence of the first of the plurality of storage devices as determined by the programs executing on the Server (See col. 17, lines 19-22).

Regarding claims 14 and 25, Cannon discloses deleting, by a software agent, the file after an expiration of a period of time indicated in the metadata (See col. 15, lines 10-35, Cannon et al.).

Regarding claim 19, this claim have substantially the same limitation as claim 8, therefore, they are rejected on similar grounds.

Regarding claim 20, Cannon further discloses supplying, by at least one of the user and a system administrator, a desired access speed for the file (See col. 28, claim 9, Cannon et al.).

Regarding claim 21, Cannon discloses supplying, by at least one of the user and a system administrator, a desired reliability for the file (See col. 8, lines 45-58, col. 12, line 60 to col. 13, line 40 and col. 28, lines 7-8, Cannon et al.).

9. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US 5,983,239), in view of Howard (US 6,519,612).

Regarding claim 1, Cannon discloses a method comprising:

- creating an electronic file (user files) in a computer system (See col. 5, lines 34-35);
- creating metadata regarding the file (database 113, Fig. 1 and col. 6, lines 30-35 and col. 7, lines 47-52), and wherein the metadata defines at least in part data management preferences for the file (See col. 6, lines 30-35); and
- implementing, storage strategies for the file based on the metadata (See col. 6, line 65 to col. 7, line 7).

However, Cannon is silent as to implementing storage strategies autonomously of a user of the file based on the metadata. On the other hand, Howard teaches implementing storage strategies autonomously of a user of the file based on the metadata (See col. 20, lines 6-27 and col. 25, lines 50-52, Howard et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement storage strategies autonomously of a user. The motivation would have been to provide updated system to the current state of storage without user intervention relay (See col. 20, lines 25-27, Howard et al.)

Art Unit: 2163

Regarding claim 2, Cannon/Howard further discloses supplying, by at least one of the user and a system administrator, a desired access speed for the file (See col. 28, claim 9, Cannon et al.).

Regarding claim 3, Cannon/Howard discloses supplying, by at least one of the user and a system administrator, a desired reliability for the file (See col. 8, lines 45-58, col. 12, line 60 to col. 13, line 40 and col. 28, lines 7-8, Cannon et al.).

Regarding claim 4, Cannon/Howard discloses wherein implementing storage strategies based on the metadata further comprises storing the file on one or more storage devices selected by a software agent based on the metadata (See col. 14, lines 40-49, Cannon et al.).

Regarding claim 5, Cannon/Howard discloses moving, by a software agent, the file to a different set of one or more storage devices based on the metadata (See col. 16, lines 38-51, Cannon et al.).

Regarding claim 6, Cannon/Howard discloses deleting, by a software agent, the file after an expiration of a period of time indicated in the metadata (See col. 15, lines 10-35, Cannon et al.).

Art Unit: 2163

Regarding claim 7, Cannon/Howard discloses providing, by a software agent, the file to

the user from a storage device without the user having to select the source from which the file is

provided (See col. 14, line 61 to col. 15, line 7, Cannon et al.).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026.

The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the

organization where this application or proceeding is assigned are 571-273-8300 for regular

communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

April 1, 2006

Page 11